

## BLAST REPORT

BLAST REPORT # WS 16☐ Sanders Construction, Inc.☒ Western States Drilling & Blasting, Inc.DATE: AUG 5, 2010

EXACT TIME OF SHOT: \_\_\_\_\_

CUSTOMER: KLBJOB NO.: WS 2605SHOT LOCATION WITH GPS COORDINATES: 1320+75 - 1322+00

TICKET NO.: \_\_\_\_\_

CHECK LIST COMPLETED: ☒ YES ☐ NO

TYPE OF ROCK: BASALT FACE HEIGHT: 24 FT. POUNDS PER DELAY: \_\_\_\_\_

TOTAL HOLES: 96

NUMBER OF HOLES: 51 HOLE DIA: 3 1/2 B x S x 30 3/4 STEMMING: 5 DEPTH: 14-22 PS

NUMBER OF HOLES: 22 HOLE DIA: 3 1/2 B x S 8 x 10 STEMMING: 5 DEPTH: 6-20 P2000

POWDER FACTOR: 1.53 #/lb LBS. OF EXPLOSIVES: 1287 YARDS OF ROCK: 2437

WEATHER: Clear WIND: Calm

EXACT MONITOR LOCATION(GPS): \_\_\_\_\_ DIRECTION OF BLAST: \_\_\_\_\_ MONITOR TYPE: \_\_\_\_\_

MONITOR: L/R \_\_\_\_\_ T \_\_\_\_\_ V \_\_\_\_\_ PVS \_\_\_\_\_ Db \_\_\_\_\_ MONITOR SERIAL NO.: \_\_\_\_\_

DISTANCE TO BLAST: \_\_\_\_\_ AVERAGE POUNDS PER HOLE: \_\_\_\_\_ OPERATOR: \_\_\_\_\_

EXACT MONITOR LOCATION(GPS): \_\_\_\_\_ DIRECTION OF BLAST: \_\_\_\_\_ MONITOR TYPE: \_\_\_\_\_

MONITOR: L/R \_\_\_\_\_ T \_\_\_\_\_ V \_\_\_\_\_ PVS \_\_\_\_\_ Db \_\_\_\_\_ MONITOR SERIAL NO.: \_\_\_\_\_

DISTANCE TO BLAST: \_\_\_\_\_ AVERAGE POUNDS PER HOLE: \_\_\_\_\_ OPERATOR: \_\_\_\_\_

## EXPLOSIVES

DESCRIPTION	QUANTITY USED	DATE CODE	MAGAZINE	REMOVED	RETURNED
LOCATION:					
BULK A/N	Lbs				
BAG ANFO	21 Bags	10AP 20			
POWDER 7/8x16	1CS+24 ea.	91119			
POWDER 7/8x16	3CS ea.	091001			
1 1/2 lb. BOOSTER	14 ea.	12JA09B4			
1 1/4 lb. BOOSTER	31 ea.	070622			
30 ft. HANDICUT	13 ea.	01MA10B4			
16 ft. "	12 ea.	22JU09B4			
12 ft. CTD42	4 ea.	31A009B4			
ft.	ea.				
ft.	ea.				
ft.	ea.				
ft. ms	ea.				
	ft.				
25 GRAIN CORD	110 ft.	09N009T4			<del>4</del>
50 GRAIN CORD	350 ft.	290C07T4			0
MISCELLANEOUS					
NLLD	1 RL	05AP10B4			
MS17	8	12JA09B4			

## COMMENTS:

NOTE: 23 PIONEERING HOLES @ TOP OF RAMP  
6' DEEP ON 4' B x 4' S PATTERN WERE FIRED IN  
ADDITION TO PLANNED BLAST

BLASTER'S SIGNATURE: Chris AllenLICENSE NO.: UP 21262

Revised 03/04

ATTACH SKETCH OF SHOT

THIS FORM MUST BE FILLED OUT COMPLETELY



NOTE: PRODUCTION STARTS @ 1320+75

STA 1321+00  
START PRESPLIT  
@ 500MS

STA 1321+10

1321+20

1321+30

1321+40

1321+50

1321+60

1321+70

END PRODUCTION  
1321+75

1321+80

1321+90

STA 1322+00

100' PRESPLIT LINE 40 HOLES  $3\frac{1}{2}" \phi$  DEPTH 18' - 24'

TYP  $3\frac{3}{4}" \phi$  PRODUCTION BOREHOLES

9' TYP

75

100

125

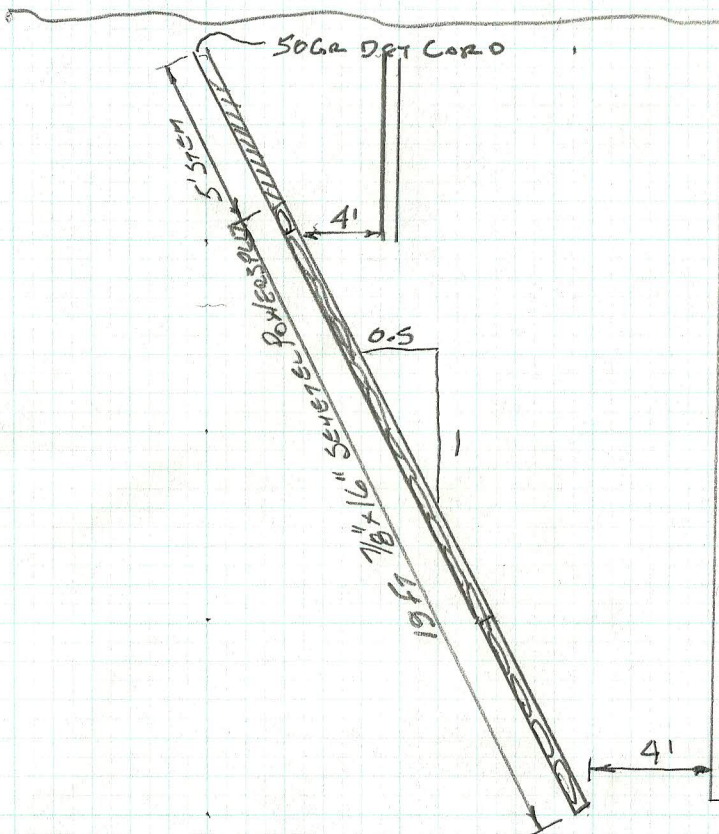
150

175

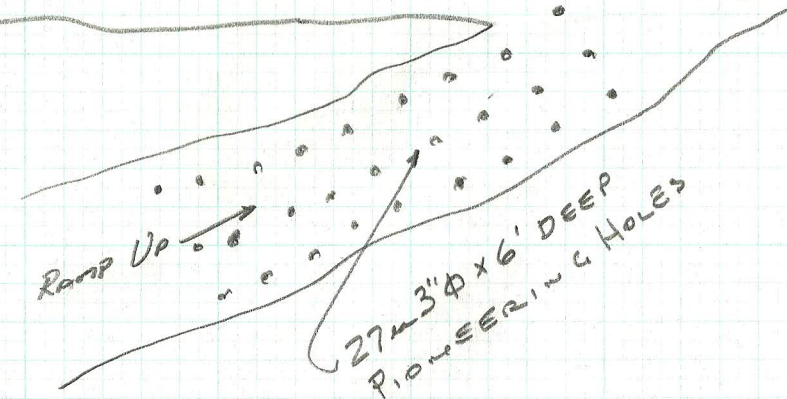
200

225

250



TYPICAL PRESPLIT HOLE & PRODUCTION  
CROSS SECTION



BLAST # WS 16  
DATE AUG 5, 2010  
8:00 PM



# Check List

Date 8-4-10

Job Number WS21005

Shot Number WS16

## 1. BEFORE BLASTING

### NOTIFICATION

- ☒ Fire Department
- ☒ Utilities
- ☒ Businesses & Home Owners
- ☒ Seismograph Tech
- ☐ Other (List)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### MATERIAL & EQUIPMENT

- ☒ Adequate Stemming Material
- ☒ Warning Signs
- ☒ Warning Signals
- ☒ Safe Amount of Lead Line
- ☒ Seismograph Paper, Pens, etc.
- ☒ Fire Extinguishers (charged)
- ☒ Adequate Blasting Shelter
- ☒ Mats (If Applicable)

### SHOT DESIGN

- ☒ Pattern OK for Area
- ☒ Sufficient Burden to Face
- ☒ Reviewed drill logs
- ☒ Measured Depth, Burden & Spacing
- ☒ Shot Area Posted & Secure
- ☒ Shot Diagramed on Back

## 2. DURING LOADING

### CONSTANT CHECKS

- ☒ Explosives
- ☒ Running Inventory
- ☒ Access Row Empty
- ☒ Drills & Traffic 50' Away
- ☒ Shot can be fired in case of emergency

All Holes to be checked & approved

- ☒ Blaster initial
- ☒ Supt initial

## 3. DETONATION

### HOOK - UP

- ☒ All Unnecessary Crew Cleared
- ☒ All Holes Loaded & Stemmed
- ☒ Hand Check tubing Before Each Connection
- ☒ Visually Insured That Each Connection is Snapped

### SECURE AREA

- ☒ Set up Seismograph
- ☒ Est. Checkpoints at Each Access
- ☒ Radio Communication with Checkpoints.
- ☒ Cleared People, Vehicles & Equipment
- ☒ Visual Coverage of Entire Site
- ☒ Five Minute Warning
- ☒ One Minute Warning

## 4. AFTER DETONATION

### POST BLAST CHECK

- ☒ Waited for Dust & Fumes to Dissipate
- ☒ Walked Entire Area of Shot
- ☒ Insured that tail Surface Delays Fired at the End of Each Row
- ☒ Sounded All Clear Signal

### LEGAL DOCUMENTATION

- ☒ Completed Shot Report
- ☒ Diagramed Shot w/ Seismograph Location (Direction & Distance)
- ☒ Recorded Seismic Results on Blast Report
- ☒ Final Inventory of Explosives Recorded
- ☒ Ticket Number Assigned By Job Supervisor
- ☒ Signed Blast Report w/ License No.

*Supt has checked and verified that all has been completed and shot area is ready for loading*

☒ Supt initial